

Vazhani Wildlife Sanctuary. *Newsl. for Birdwatchers* 33(2): 20-21.

THIRUMURTHI, S. & C.P. BANUMATHI (1998): *The Melia*

azadirachta tree — a keystone species for frugivorous birds in Himachal Pradesh. *Newsl. for Birdwatchers* 38(4): 68-69.

32. *CLEOME SCAPOSA* DC., CAPPARACEAE — A RARE SPECIES FOR SAURASHTRA

(With one text-figure)

While surveying the vegetation of Saurashtra University Campus, Rajkot, Saurashtra, Gujarat an interesting species of *Cleome* was observed near a puddle of stagnant rainwater in a small colony and in isolation on gravelly sandy soil. On critical examination, the specimen was identified as *Cleome scaposa*, a species reported earlier by Shah (1978) as occurring in Saurashtra. However, it has been not documented by Thaker (1910), Santapau (1962), Santapau and Janardhana (1967) and,

Bole and Pathak (1988). Its habit and habitat with a brief description and illustration is given here.

Cleome scaposa DC. Prodr. 1: 239, 1824; Fl. West Pak 34: 30, 1973.

Herb, annual, 10-18 cm tall. Slender, erect, unbranched, hairy with glandular hairs. Leaves simple, suborbicular to ovate-elliptic, scabrous; petiole 5-15 mm long, ciliate hairy; upper leaves almost sessile. Inflorescence raceme lax, elongated, increasing up to 14-15 cm in fruit,

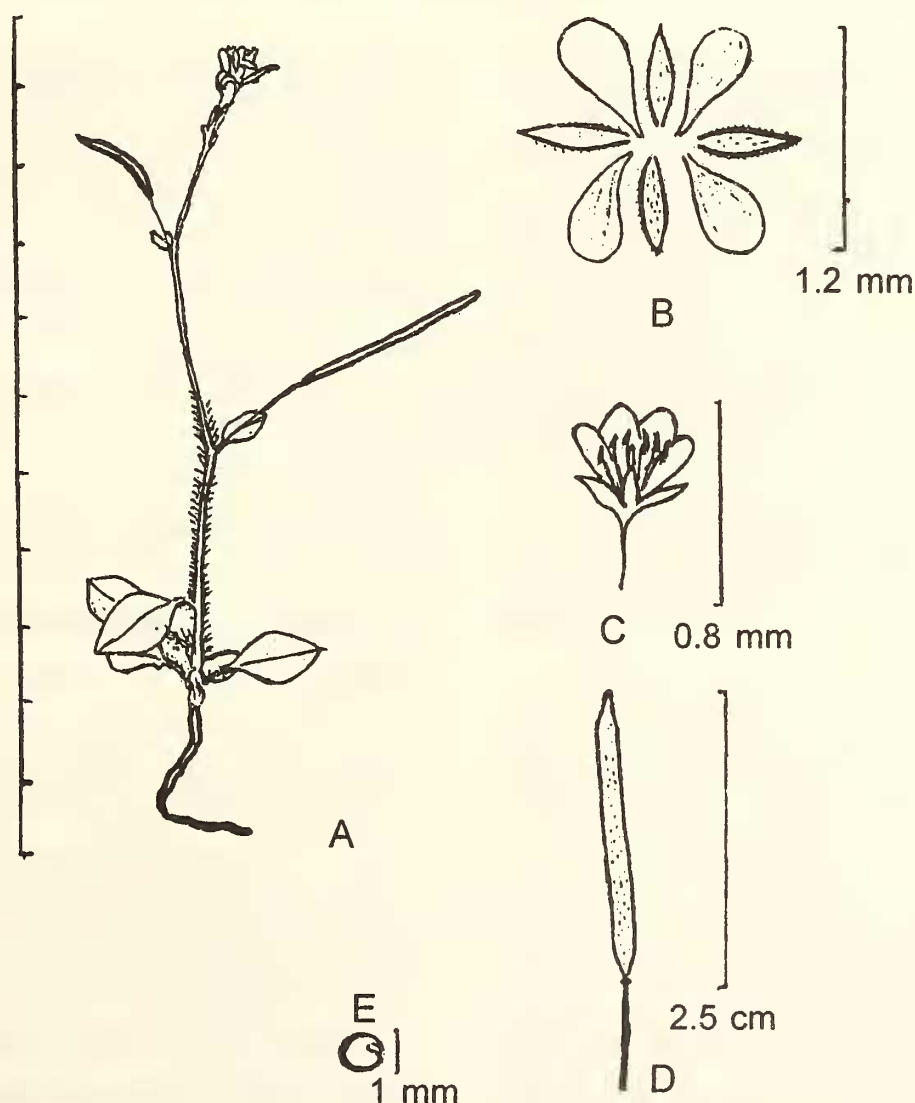


Fig. 1: *Cleome scaposa* DC.; A. Habit, B. Sepals and petals, C. Flowers, D. Fruit, E. Seed

filiform, ultimately spreading. Sepals elliptic hairy, pubescent. Petals oblong-obovate, yellowish. Stamens 6, about as long as petals, not exerted. Capsule linear, slender, 1.5-3 cm, often spreading and accurately curved, glabrous or slightly glandular, many seeded, style minute; seed glabrous, minutely granular, brown black.

Fl. & Fr.: July-September.

Present status: Very Rare.

Habitat: Gravelly, sandy, soil near water bodies.

Specimen examined: PSN 891a.

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33. OCCURRENCE OF *HIBISCUS RADIATUS* CAV. (MALVACEAE) IN PUNJAB

During November 1999, some fruiting plants were observed growing in a wasteland at Patiala. In 2000, the specimens were gathered while flowering and fruiting, and the species identified as *Hibiscus radiatus* Cav. This species has not been reported earlier from Punjab (Sharma 1990, 1994). Further, in the most recent work on the Malvaceae of India (Paul 1993), its range of distribution has been recorded from several states, but not from any state of northwest India including Punjab. Apparently, it is a new introduction to the flora of Punjab State. Brief information about the specimen collected is given below.

Hibiscus radiatus Cav. Diss. 3: 150.t.54.f.2. 1787; Masters in Hook f. Fl. Brit. India 1: 325. 1874; Paul in Sharma and Sanjappa, Fl. India 3: 327.f.90.1993.

Description: Erect undershrub, up to 1.5 m tall. Stems covered with long simple hairs and bulbous-based retrorse prickles, ultimately glabrescent. Leaves 3-15 x 1.5-12 cm, palmately 3-5 (-7)-lobed nearly to base; lobes variable, linear to lanceolate, ovate to oblong or obovate,

coarsely or sharply serrate, acute to acuminate, glabrous or with stout hairs on veins beneath; petioles 2-15 cm long, unarmed or sparsely aculeate; stipules 5-8 mm long, linear, bristly. Flowers solitary, axillary, showy, 5-6 cm across, purple with a darker centre; pedicels up to 2.5 m long, jointed, pubescent below the joint. Bracteoles (epicalyx – segments) 8 or 10, 1.5-1.8 x 0.15-0.2 cm, linear, acute, forked at apex, covered with bulbous-based bristles 1-2 mm long, often with an appendage on the inner side towards apex. Calyx 1.8-2 cm long, accrescent and stiff in fruit; lobes ovate to deltoid, long – acuminate, glabrous inside, bristly outside. Petals obovate, sparsely hairy outside. Staminal tube 1.5-2.2 cm long with laxly arranged anthers throughout. Ovary 5-7 mm long, globose, white-hirsute; style-arms purple; stigmas capitellate, dark purple. Capsules 2-2.5 x 1.2-1.5 cm, ovoid, shortly beaked, bristly, longitudinally 5-valved. Seeds 4 mm across, scabrous, brown.

Notes: The species under report belongs to the section *Furcaria* characterized by prickly stems, linear to lanceolate bracteoles forked at